

Serial No.: 10/519,000
Art Unit: 2626

PU020292

Remarks/Arguments

The Office Action mailed August 12, 2008 has been reviewed and carefully considered.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested. Claims 1–22 remain pending in the application, and new independent claims 23 and 24 have been introduced. Claims 1, 11, and 20 have been amended to further prosecution. No new matter has been added.

Claims 1–4, 8, 11–18, and 20–22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,245,667 to Lew (hereinafter “Lew”) in view of U.S. Patent Publication No. 2003/0195645 to Pillay et al. (hereinafter “Pillay”) and further in view of U.S. Patent No. 4,837,831 to Gillick et al. (hereinafter “Gillick”).

Claims 5–7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lew in view of Pillay and Gillick and further in view of U.S. Patent No. 5,490,130 to Akagiri (hereinafter “Akagiri”).

Claims 9–10 and 19 are rejected 35 U.S.C. § 103(a) as being unpatentable over Lew in view of Pillay and Gillick and further in view of U.S. Patent No. 7,180,892 to Tackin (hereinafter “Tackin”).

Although applicants believe that the claims as previously presented were in condition for allowance, claims 1, 11, and 20 have been amended to further prosecution. Claim 1 as amended recites, inter alia, “constructing a timing window from an estimated bit time . . . wherein said bit time is estimated by averaging a plurality of data stream pulse lengths.” Claims 11 and 20 recite analogous language. The present specification discloses the subject matter of this amendment in page 12, line 23 through page 13, line

Serial No.: 10/519,000
Art Unit: 2626

PU020292

26. One technique for encoding audio data makes use of transitions in the signal to delineate bits, with different lengths of time between transitions signifying different bits. Therefore, in order to decode such an audio data signal, it is necessary to know how long the pulses last, in order to distinguish between 1s, 0s, and special bits called "preambles." This pulse length is called the "bit time." The Examiner asserts that Lew discloses the estimation of bit times in column 6, lines 16-32. However, this portion of Lew says only that clocking information is obtained from the bit transitions. It does not disclose or suggest anything estimating bit time, and makes no reference whatsoever to any particular means for estimation.

Pillay discusses estimation, but uses a completely different method. Paragraphs 64 and 67 of Pillay clearly indicate that the estimated bit time is always set to be the shortest measured pulse. This differs significantly from the claimed feature of estimating using an average over a plurality of pulses.

It should also be noted that the third reference that the Examiner cites in this rejection, Gillick, deals with greatly divergent subject matter. Gillick discusses voice recognition techniques, and has nothing to do with the low-level decoding of a data stream. As such, it does not discuss bit times at all, and certainly doesn't discuss any means for *estimating* bit times. In fact, it is difficult to see how one skilled in the art could be expected to be aware of Gillick, given that it belongs to a wholly unrelated art.

It is therefore respectfully asserted that Lew, Pillay and/or Gillick, taken alone or in any combination, fail to disclose or suggest the estimation of bit time by averaging a plurality of pulse lengths.

Claim 1 also recites "extracting plural digital audio data words from said serialized stream of digital audio." Claim 11 contains analogous language. The

Serial No.: 10/519,000
Art Unit: 2626

PU020292

Examiner concedes that neither Lew nor Pillay discloses this element, but asserts that Gillick does teach it. However, as pointed out above, Gillick belongs to a much different field. Gillick belongs to the art of voice recognition and deals with recognizing spoken words, but does not discuss extracting *data words*, which have nothing to do with verbal utterances. A data word is a unit of data of a fixed length that depends upon the architecture in question. For instance, in Intel x86 architectures, a word is sixteen bits long, and other systems use different sizes. In this context therefore, when discussing the extraction of data from a digital data stream, one extracts them in units of individual data words (i.e., 16, 32, or however many bits at a time as dictated by the particular implementation).

It is therefore respectfully asserted that Lew, Pillay and/or Gillick, taken alone or in combination, do not disclose or suggest the extraction of data words from a serialized stream of digital audio.

In view of the above arguments, Applicants believe that claims 1, 11, and 20 are in condition for allowance. In addition, claims 2–10, 12–19, and 21–22 depend on claims 1, 11, and 20 respectively, and it is believed that these claims are therefore also in condition for allowance.

It should be noted, however, that several dependent claims contain allowable subject matter beyond that claimed in claims 1, 11, and 20. As a non-limiting example, claim 9 recites, inter alia, “estimating minimum and maximum bit window times.” Claim 19 recites analogous language. The Examiner concedes that Lew, Pillay, and Gillick fail to disclose this element, but asserts that Tackin discloses the claimed subject matter in column 26, line 53 through column 27, line 9. However, the cited portion of Tackin makes no reference to estimated bit times or bit window times. Instead, Tackin estimates

Serial No.: 10/519,000
Art Unit: 2626

PU020292

"the energy and spectrum of the background noise parameters." These noise parameters have nothing to do with bit window times, and Tackin clearly does not disclose or suggest bit window times. Indeed, nothing in Tackin relates in any way to the estimated bit window times claimed by the present invention. It is therefore respectfully asserted that Lew, Pillay, Gillick, and/or Tackin, taken alone or in combination, fail to disclose or suggest estimating minimum and maximum bit window times.

Furthermore, Tackin is another voice recognition reference, and as noted above with Gillick, Applicants believe that Tackin is not an appropriate reference to combine with Lew and Pillay. Therefore, it is respectfully asserted that the combination of Lew, Pillay, Gillick, and Tackin is not obvious.

In light of the above, Applicants introduces new claims 23 and 24. These new claims incorporate the claim language of claims 9 and 19 respectively, written in independent form. It is believed that these two independent claims are in condition for allowance.

In view of the foregoing, Applicant respectfully requests that the rejections of the claims set forth in the Office Action of August 12, 2008 be withdrawn, that pending claims 1-24 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

Serial No.: 10/519,000
Art Unit: 2626

PU020292

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicant's representatives Deposit Account No. 07-0832.

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November 04, 2008